EXHIBIT 2

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(54) **DATA TRANSPORT ACCELERATION AND MANAGEMENT WITHIN A NETWORK COMMUNICATION SYSTEM**

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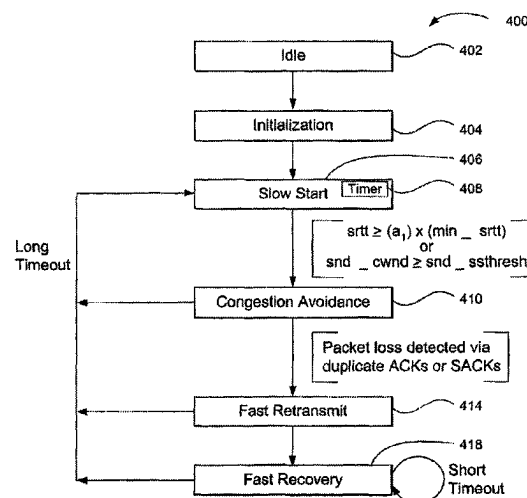Appl. No.: **10/061,574**
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H04L 1/1867	(2023.01)

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(58) **Field of Classification Search**
None
See application file for complete search history.

(56) **References Cited**

To view the complete listing of prior art documents cited during the proceeding for Reexamination Control Number 90/019,446, please refer to the USPTO's Patent Electronic System.

Primary Examiner — Matthew E Heneghan

(57) **ABSTRACT**

Improved data transport and management within a network communication system may be achieved by utilizing a transmit timer incorporated within the sender device and exploiting host-level statistics for a plurality of connections between a sender and receiver. The period of the transmit timer may be periodically adjusted based on a ratio of the smoothed round-trip time and the smoothed congestion window, thereby reducing or eliminating bursty data transmission commonly associated with conventional TCP architectures. For applications having a plurality of connections between a sender and a receiver that share a common channel, such as web applications, the congestion window and smoothed round trip time estimates for all active connections may be used to initialize new connections and allocate bandwidth among existing connections. This aspect of the present invention may reduce the destructive interference that may occur as different connections compete with one another to maximize the bandwidth of each connection without regard to other connections serving the same application. Error recovery may also be improved by incorporating a short timer and a long timer that are configured to reduce the size of the congestion window and the corresponding transmission rate in response to a second packet loss with a predefined time period in order to increase resilience to random packet loss.

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EX PARTE
REEXAMINATION CERTIFICATE

NO AMENDMENTS HAVE BEEN MADE TO
THE PATENT

AS A RESULT OF REEXAMINATION, IT HAS BEEN
DETERMINED THAT:

The patentability of claims **1-15** is confirmed.

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